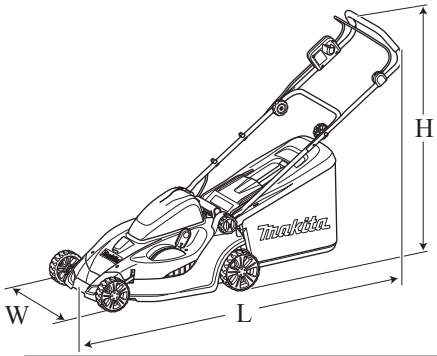
# TECHNICAL INFORMATION



**Model No.** ► BLM430, LM430D

**Description** ► 430mm Cordless Lawn Mower

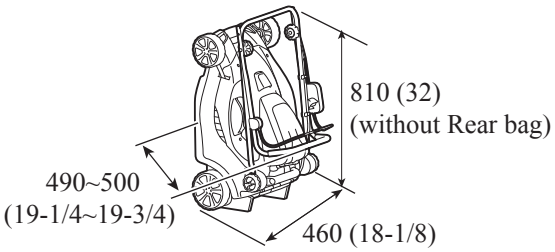



| Dimensions: mm (inch) | | |
|---|---|---|
| Length (L) | minimum | 1,450 (57) |
| | maximum | 1,490 (58-3/4) |
| Width (W) | | 460 (18-1/8) |
| Height (H) | minimum | 950 (37-1/2) |
| | maximum | 1,020 (40-1/4) |

## CONCEPT AND MAIN APPLICATIONS

Models LM430D, BLM430, (HML01)*1 is Cordless Lawn mower equipped with rotary blade cutting system.
Its main benefits are:

- Environment-friendly with zero emission and minimum noise pollution
- Compatible with both Makita 36V-2.6Ah Li-ion battery BL3626 and 36V-2.2Ah Li-ion battery BL3622A
- Compatible with Battery converters, BCV01 and BCV02
- Adjustable 13 cutting heights from 20mm to 75mm
- The storage space can be saved by standing the machine on its rear end (See illustrated right.)
- Handle height is adjustable in 2 stages




This product is available in the variations listed below.

| Model No. | Charger | Battery | | Battery cover | Battery converter |
|---|---|---|---|---|---|
| | | Type | Quantity | | |
| LM430DZ | No | No | No | No | No |
| LM430DWB | DC36WA | BL3622A | 1 | No | No |
| LM430DWBE | DC36WA | BL3622A | 2 | 1 | No |
| BLM430Z | No | No | No | No | No |
| BLM430RD | DC36RA | BL3626 | 1 | No | No |
| BLM430RDE | DC36RA | BL3626 | 2 | 1 | No |
| BLM430ZX2C | No | No | No | No | BCV02 |
| HML01Z*1 | No | No | No | No | No |
| HML01C1*1 | DC36WA | BL3622A | 1 | No | No |

**Note**: All models also include the accessories listed below of "Standard equipment".

## ► Specification

| | | |
|---|---|---|
| Battery | Cell | Li-ion |
| | Voltage: V | 36V |
| | Capacity: Ah | 2.2/ 2.6 |
| | Charging time (approx.): min. | 60 with DC36WA/ 22 with DC36RA |
| Max output (W) | | 580 |
| No load speed: min.$^{-1}$=rpm*2 | | 3,600 |
| Blade | Type | Rotary type 2 tooth blade |
| | Inner diameter: mm (") | 24.0 (15/16) |
| Cutting width: mm (") | | 430 (17) |
| Cutting height adjustment range: mm (") | | 20 - 75 (13/16 - 2-15/16), 13 stages |
| Electric brake | | Yes |
| Soft start | | Yes |
| Weight according to EPTA-Procedure 01/2003*3: kg (lbs) | | 18.1 (39.9)*4, 17.9 (39.4)*5 |

***2:** No load speed of the cutting tool
***3:** with battery, blade, grass bag
***4:** for North and Central American countries
***5:** All countries except North and Central American countries

## ► Standard equipment

Socket wrench ..... 1
Blade 430 ..... 1

**Note:** The standard equipment for the tool shown above may vary by country.

## ► Optional accessories

Battery 3622A
Battery BL3626
Charger DC36WA
Fast charger DC36RA
Battery converter BCV01
Battery converter BCV02

# Repair

**CAUTION: Repair the machine in accordance with "Instruction manual" or "Safety instructions".**

## [1] NECESSARY REPAIRING TOOLS

| Code No. | Description | Use for |
|---|---|---|
| 1R285 | Round bar for Arbor 11-50 | removing Plane bearing 10 from Front/ Rear wheels |

## [2] ASSEMBLY/ DISASSEMBLY

### [2]-1. Handle section

DISASSEMBLING

(1) Lift and remove Rear bag section from Deck. (**Fig. 1**)
While holding Handle section (Lower pipe, Upper pipe complete, etc.), loosen two M6 Thumb screws. (**Fig. 1**)
Handle section is removed. (**Fig. 2**)
(2) Remove two Holders 9-19 from Lower pipe.
Remove two M6 Thumb nuts and M6x50 two Cup hex square neck bolts, and then separate Upper pipe complete from Lower pipe. (**Fig. 3**)
Lower pipe can be replaced.
(3) Loosen 4x18 Tapping screw, then remove Switch lever case and Switch lever case cover. (**Fig. 4**)
(4) Loosen four 4x18 Tapping screws, then remove Switch box cover complete and Switch box. (**Fig. 5**)
(5) Remove Tension spring 9, and then separate Lever and M4x20 Pan head screw with WR (spring washer and Flat washer) from Switch box and Switch lever.
Upper pipe complete and Lever can be replaced.
(**Fig. 6**)

**Fig. 1**

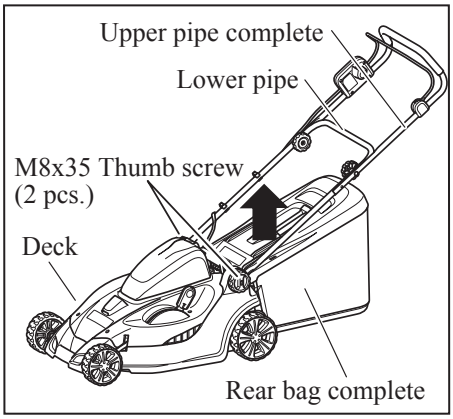



**Fig. 2**

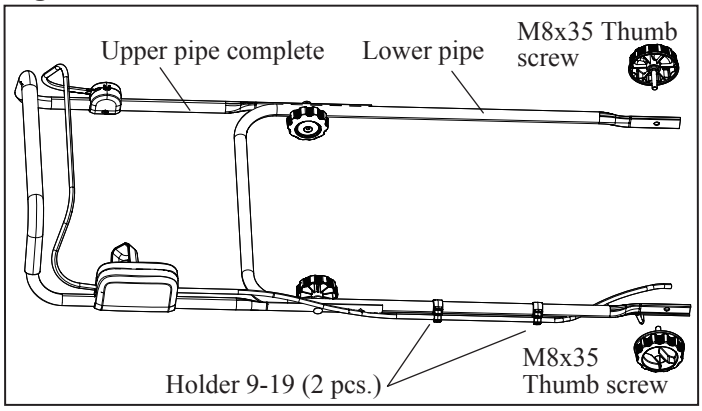



**Fig. 3**

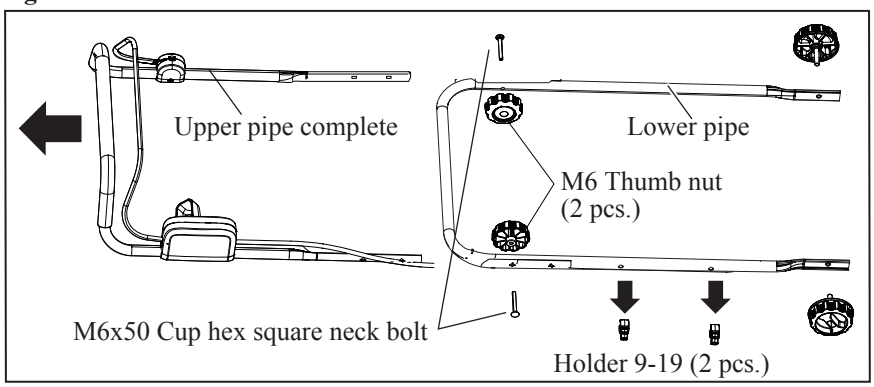



**Fig. 4**

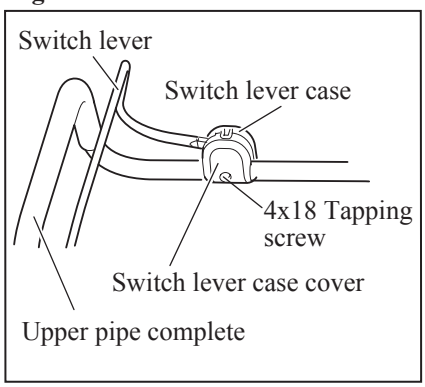



**Fig. 5**

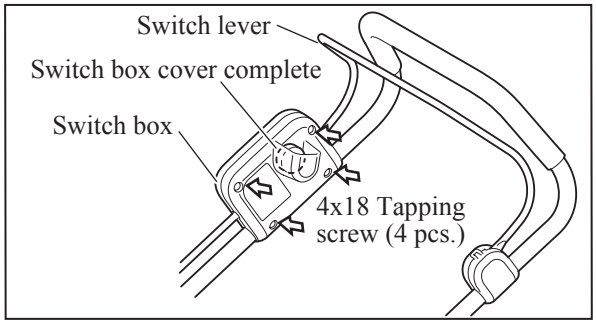
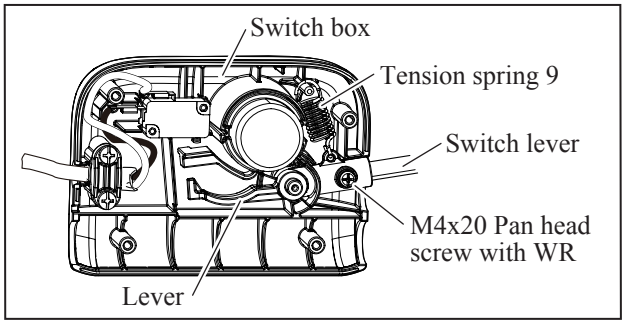



**Fig. 6**



# Repair

## [2] ASSEMBLY/ DISASSEMBLY

## [2]-1. Handle section (cont.)

ASSEMBLING

Assemble Handle section in the reverse order of disassembly.

**Note**: • Face the top of Lever to the upper side when assembling Lever to Switch lever. (**Fig. 7**)
While holding the insert nut on lever so as not to separate, assemble Lever to Switch lever with M4x20 Pan head screw with WR.
• Be careful to the direction of Compression spring 9. Refer to **Fig. 6** in the previous page.
• Assemble Lower pipe to Upper pipe complete so that the two holes of Lower pipe come to Switch box side. (**Fig. 8**)
• Route Power supply cord along Lower pipe, and fix it in the lower holders of two Holders 9-19, then pass it over Lower pipe near the hinge. (**Fig. 8**)

**Fig. 7**

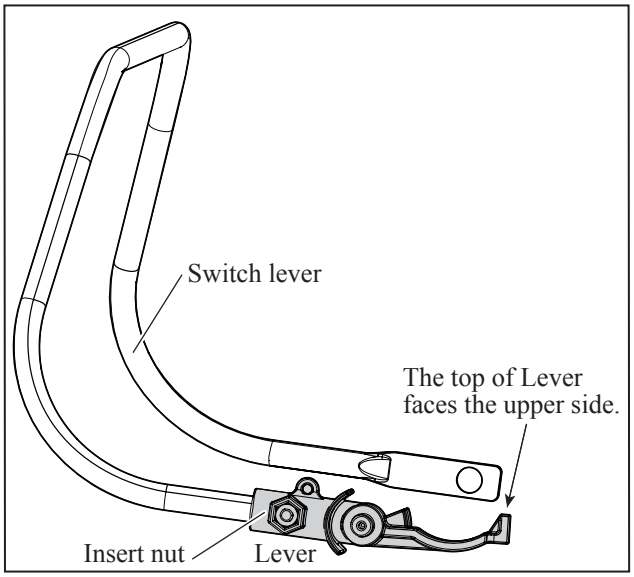
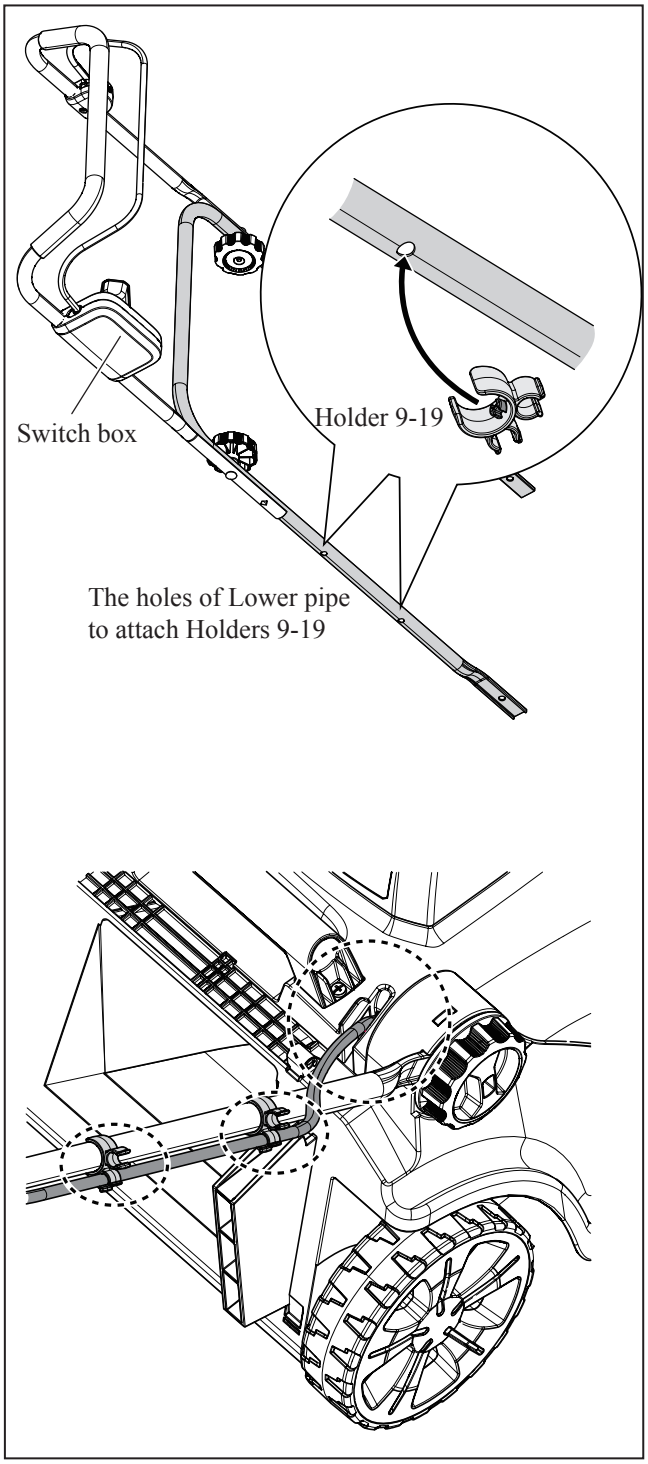



**Fig. 8**



# Repair

## [2] ASSEMBLY/ DISASSEMBLY

## [2]-2. Motor section

REPLACING

(1) Remove Blade.
(2) Pull Lock lever to release the locking of Battery cover complete, and then open Battery cover complete. (**Fig. 11**)
Remove the hinge of one side carefully, and separate it from Cowling. (**Fig. 12**)
And then, remove the other hinge in the same way.
(3) Remove Grip A by unscrewing two 5x25 Tapping screws. (**Fig. 13**)
(4) Remove six 4x18 Tapping screws. Shift Change lever to the position of Cutting height between 40 and 60mm. (**Fig. 14**)
(5) Pass Terminal housing through the square hole of Cowling without disconnecting the lead wires as drawn in **Fig. 15**.
Cowling can be removed toward the upper direction. (**Fig. 15**)
(6) Remove three M6x30 Pan head screws. DC motor can be replaced. (**Fig. 16**)

**Fig. 11**

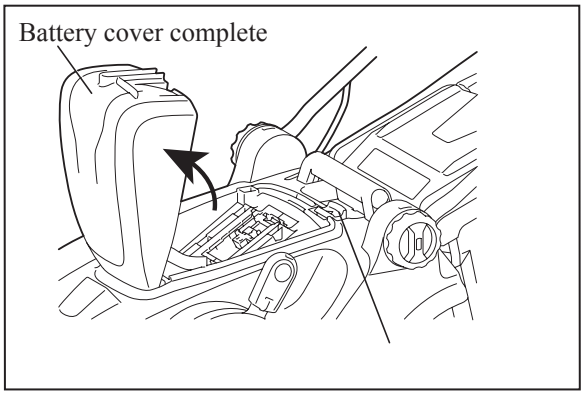



**Fig. 12**

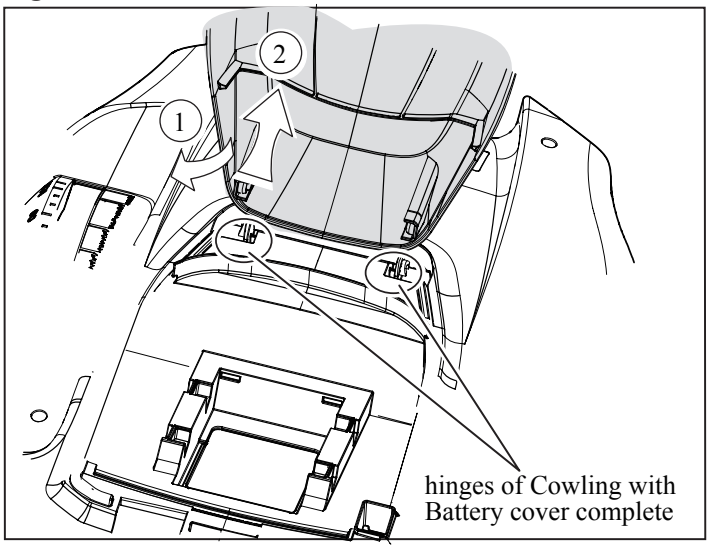



**Fig. 13**

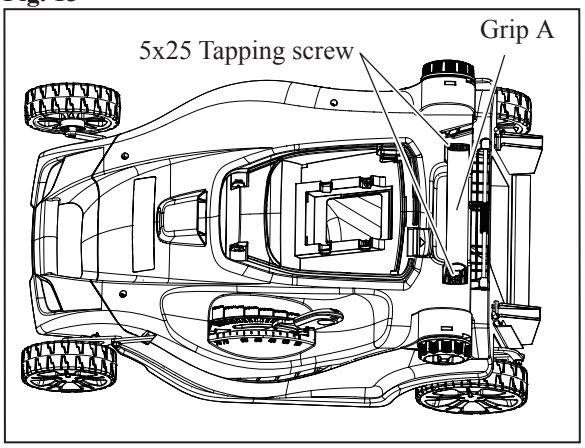



**Fig. 14**

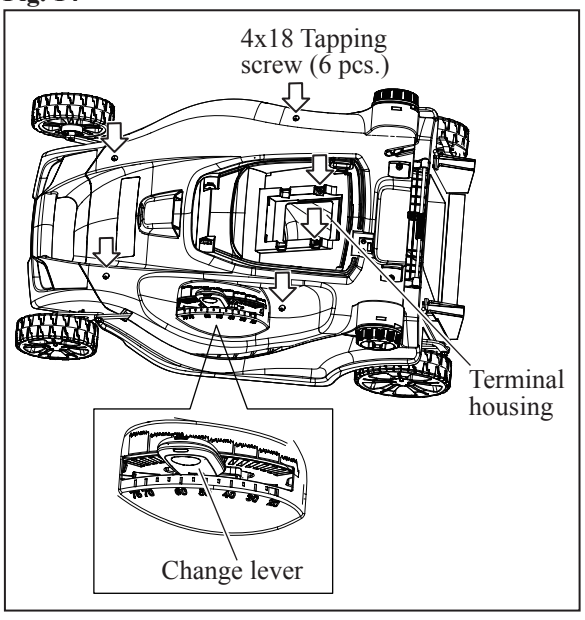



**Fig. 15**

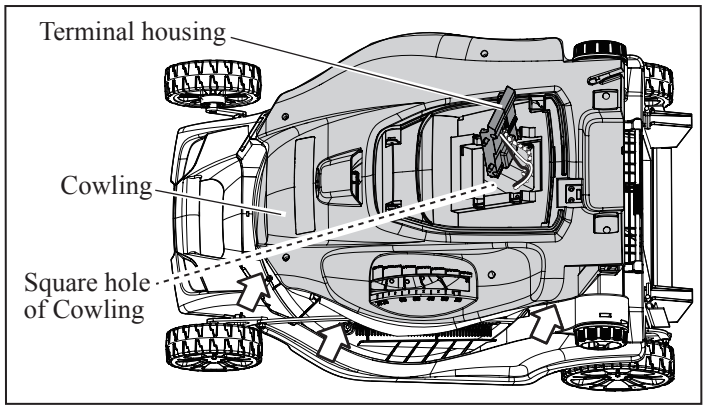
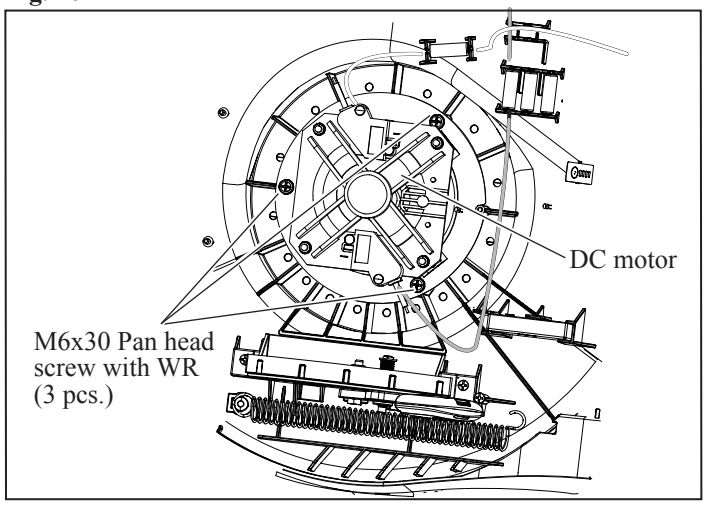



**Fig. 16**



# Repair

## [2] ASSEMBLY/ DISASSEMBLY

### [2]-3. Change lever section

DISASSEMBLING

(1) Remove Cowling. (Refer to the previous page.)
(2) Shift Change lever to the position of grass cutting height 75mm.
(3) Detach the hook of Tension spring 16 from the projection of Deck using long-nose pliers. (**Fig. 17**)
(4) Put a wood under Deck to raise Wheels from the ground. (**Fig. 18**)
(5) Unscrew two 4x18 Tapping screws, and separate the pin of Connecting rod from the hole of Change lever, and then remove Change lever section from Deck toward DC motor side. (**Fig. 19**)
(6) Remove Change lever cover, and then separate screws, bolt and nut as drawn in **Fig. 20**.

ASSEMBLING

Assemble Change lever section in the reverse order of disassembly.
**Note**: Lift Connecting rod and insert the pin into the hole of Connecting rod. (**Fig. 21**)

**Fig. 17**

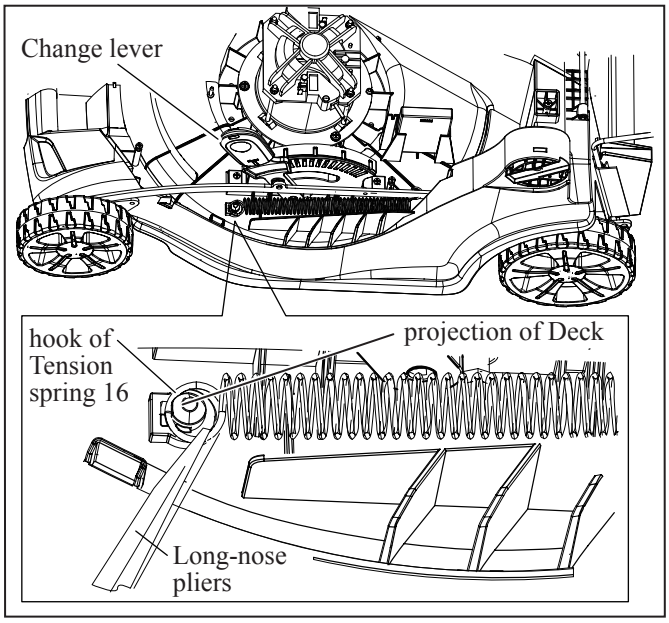



**Fig. 18**

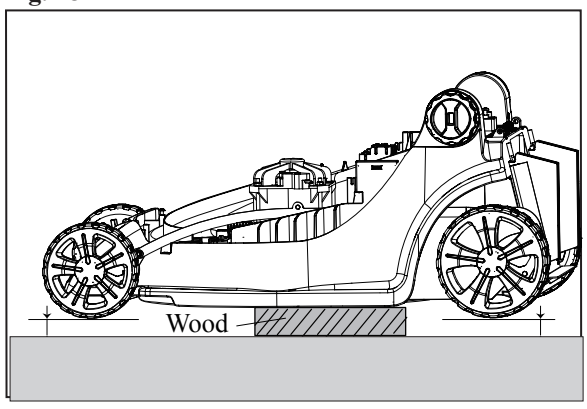



**Fig. 19**

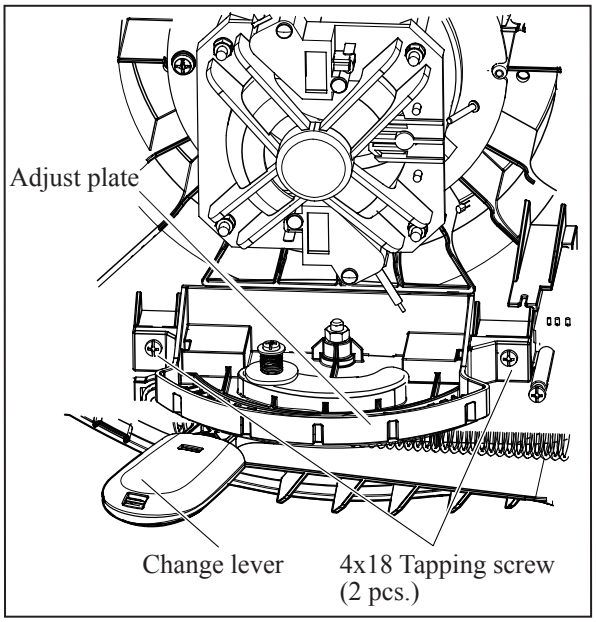



**Fig. 20**

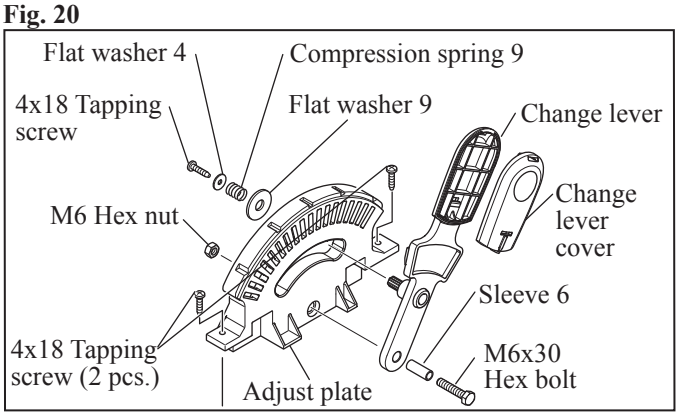
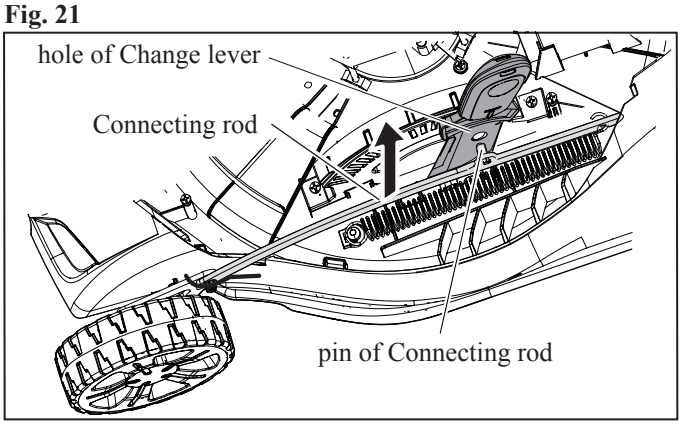



**Fig. 21**



# Repair

## [2] ASSEMBLY/ DISASSEMBLY

### [2]-4. Wheels

DISASSEMBLING

(1) Pull Front wheel caps straight out of Front wheels. (**Fig. 22**) Remove Rear wheel caps in the same way.
(2) Remove M8 Collared hex nuts and Front wheels from Front shaft. (**Fig. 23**)
Separate Rear wheels from Rear shaft in the same way.
(3) Tap the edge of each wheel with plastic hammer. Ball bearings 6200ZZ in the wheels are removed. (**Fig. 24**)
(4) Press each Plane bearing 10 out of the wheels with 1R285 as drawn in **Fig. 25**.

ASSEMBLING

Assemble each wheel section in the reverse order of disassembly. Refer to **Fig. 26**.

**Fig. 22**

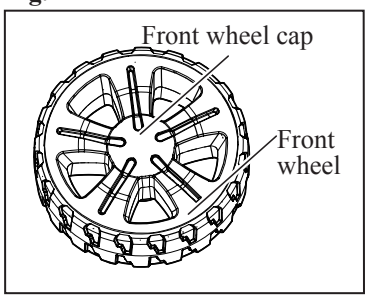



**Fig. 23**

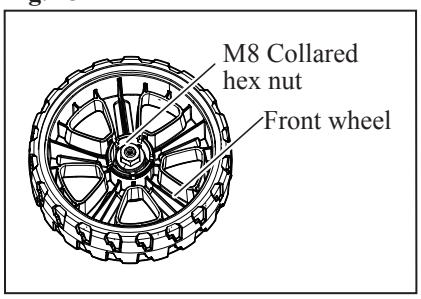



**Fig. 24**

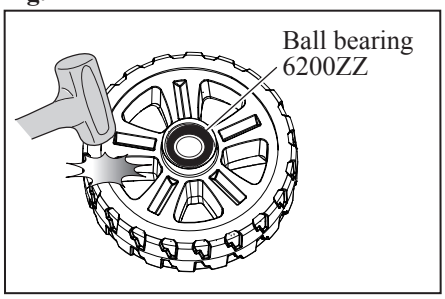



**Fig. 25**

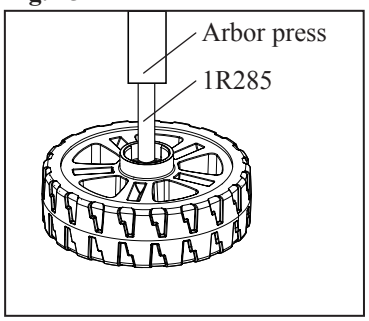
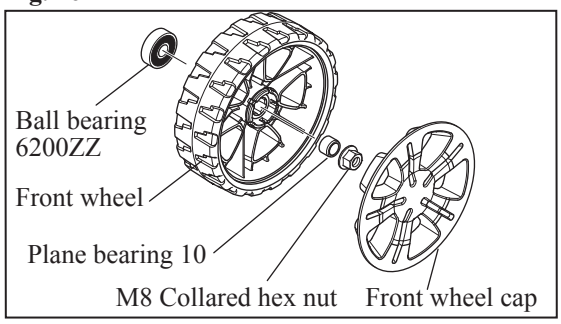



**Fig. 26**




### [2]-5. Connecting rod, Shafts

DISASSEMBLING

(1) Remove the assembled part of Lower pipe and Upper pipe complete.
(Refer to **[2]-1. Handle section.**)
(2) Remove Cowling. (Refer to **[2]-2. Motor section.**)
(3) Remove the assembled part of Change lever and Adjust plate.
(Refer to **[2]-3. Change lever section**.)
(4) Remove Front wheels and Rear wheels. (Refer to **[2]-4. Wheels.**)
As for the specifications for North America, remove two 4x18 Tapping screws and Protective shield. (**Fig. 27**)
(5) Loosen two M5-8 Hex lock nut and remove Connecting rod. (**Fig. 28**)
(6) Loosen six 4x18 Tapping screws. Front shaft and Rear shaft can be removed. (**Fig. 29**)

Fig. 27

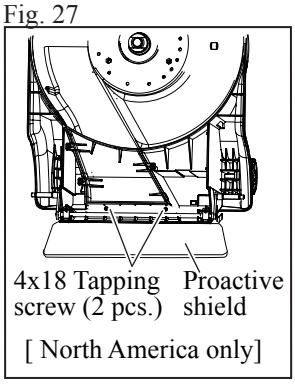



Fig. 28

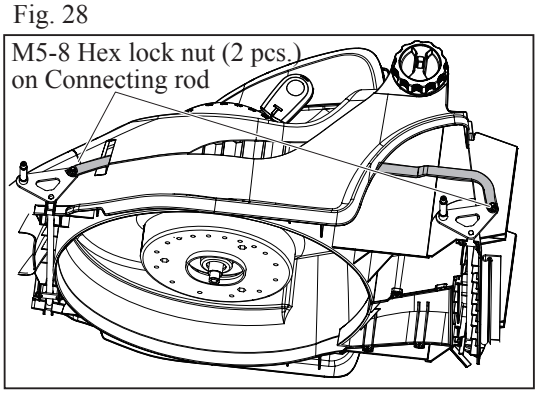
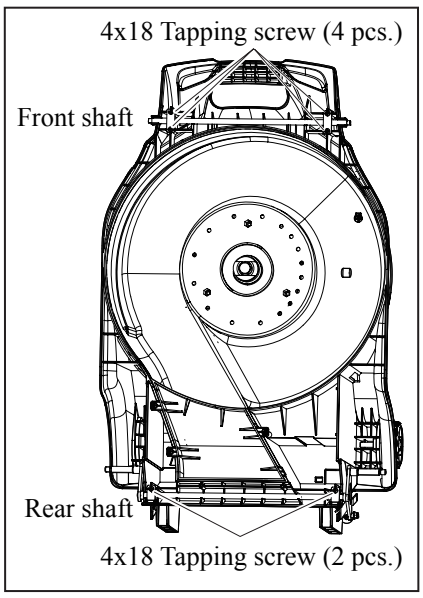



Fig. 29



# Repair

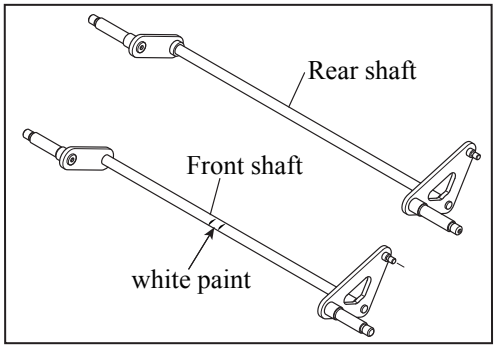
## [2] ASSEMBLY/ DISASSEMBLY

## [2]-5. Connecting rod, Shafts (cont.)

ASSEMBLING

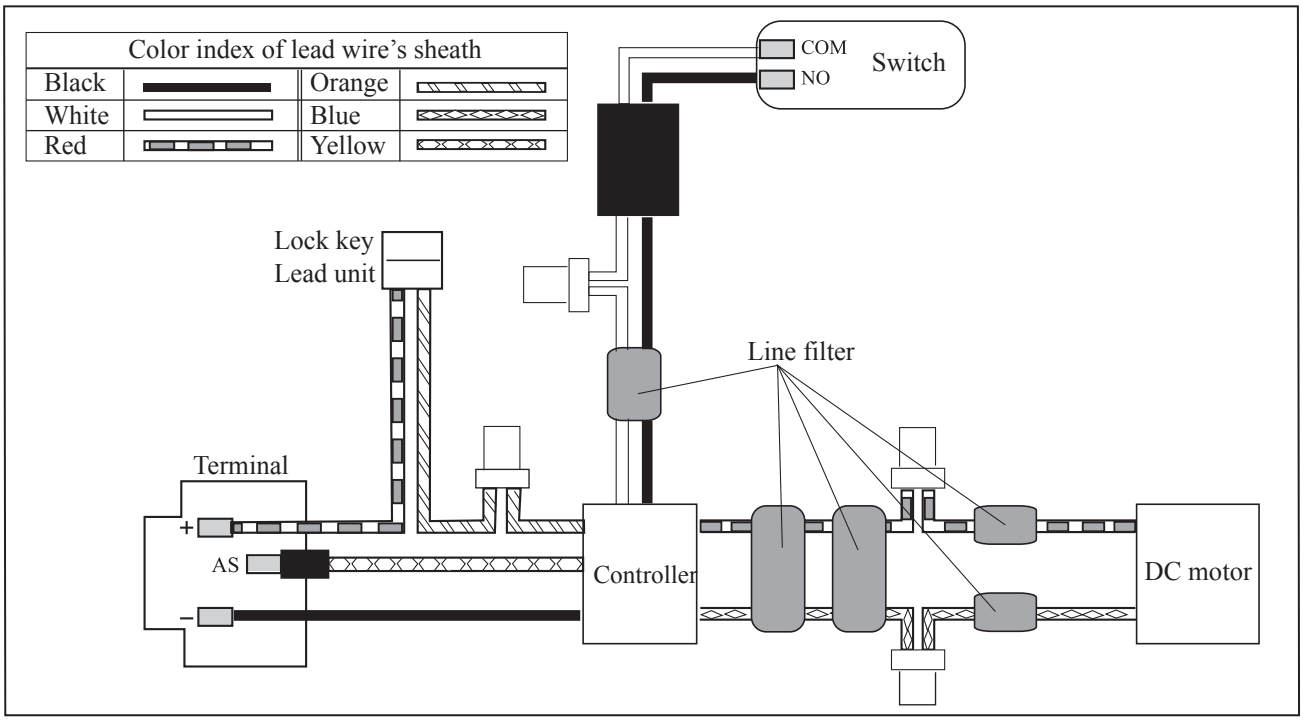
Assemble each wheel section in the reverse order of disassembly.
Distinguish Front shaft from Rear shaft by the white paint. (**Fig. 30**)

**Fig. 30**



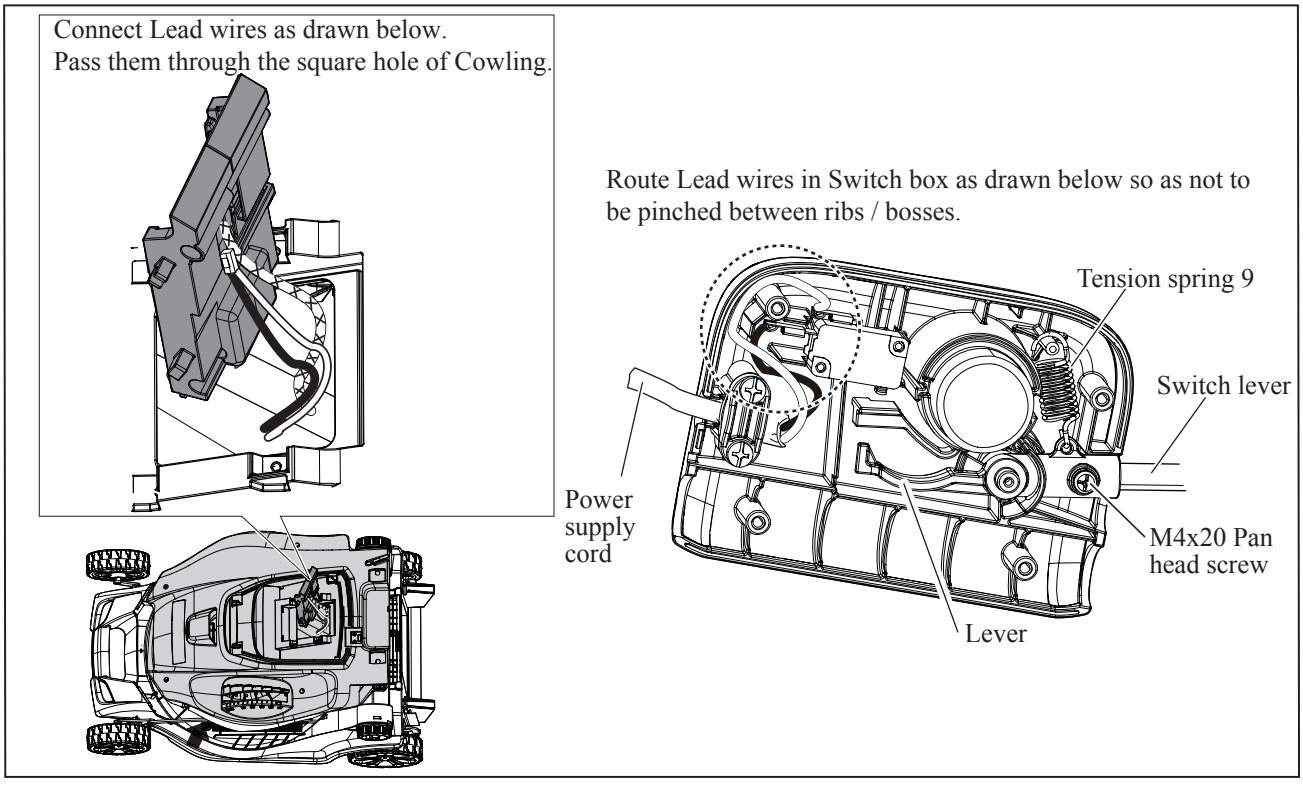

# Circuit diagram

**Fig. D-1**




# Wiring diagram

**Fig. D-2**



## ► Wiring diagram (cont.)

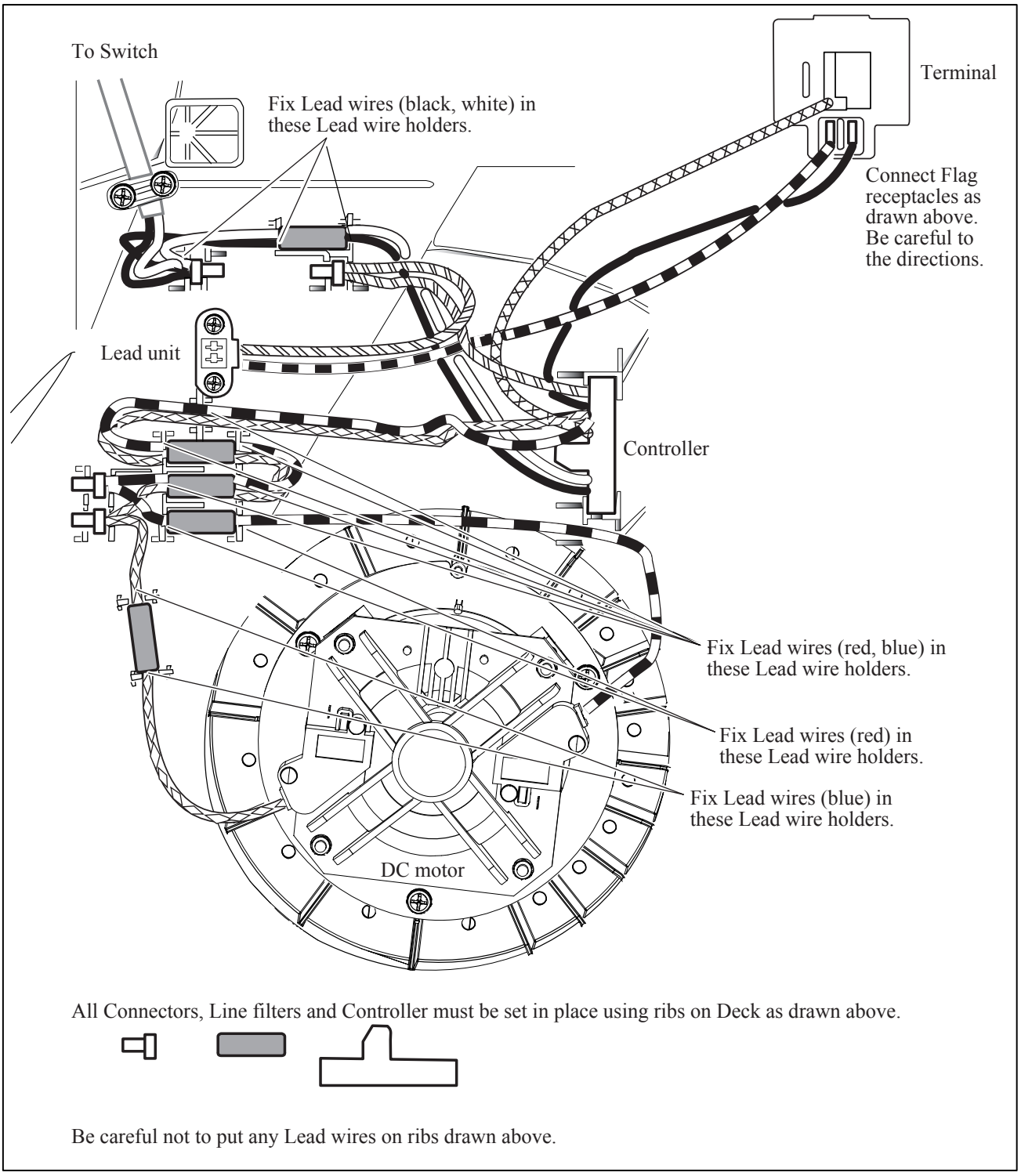



**Fig. D-3**